UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

BRYN HILL INDUSTRIES, INC. on behalf of itself and all others similarly situated Plaintiffs, v. BASF AG; BASF CORP.; BAYER AG; BAYER CORP.; COVESTRO AG; COVESTRO LLC; DOWDUPONT INC.; DOW CHEMICAL CO.; HUNTSMAN CORP.; HUNTSMAN INTERNATIONAL LLC; MCNS POLYURETHANES USA, INC.; MITSUI CHEMICALS, INC.; MITSUI CHEMICALS AMERICA, INC.; MITSUI CHEMICALS & SKC POLYURETHANES, INC.; WANHUA CHEMICAL GROUP CO. LTD.; WANHUA CHEMICAL (AMERICA) CO. LTD.; WANHUA CHEMICAL US HOLDING, INC. Defendants.	Case No.: 18-cv-7852 **CLASS ACTION COMPLAINT** **JURY TRIAL DEMANDED**

1. Plaintiff Bryn Hill Industries, Inc., on behalf of itself and all others similarly situated, by their counsel, assert claims for violations of federal antitrust laws against the Defendants identified below arising from the conspiracy among the Defendants and other co-conspirators to reduce the global supply of Isocyanates—chemical precursors that form part of $53 billion industry—by reducing their output through coordinated plant shutdowns and suspensions, thereby allowing the Defendants to impose a series of lockstep price increases from on or before January 2016 through the present (the "Class Period").

2. Except as alleged in this Complaint, neither the Plaintiff nor other members of the public have access to the underlying facts relating to Defendants' improper activities. Rather,

that information lies exclusively within the possession and control of the Defendants and other insiders, which prevents the Plaintiff from further detailing the Defendants' misconduct. Moreover, a pending criminal investigation by the United States Department of Justice ("DOJ"), concerning price-fixing of methylene diphenyl diisocyanate ("MDI"), an Isocyanate, will yield information from the Defendants' internal records or personnel that bears significantly on the Plaintiff's claims. The Plaintiff thus believes further evidentiary support for their allegations will come to light after a reasonable opportunity for discovery.

NATURE OF THE ACTION

3. This lawsuit is brought against the Defendants (Covestro, Dow, BASF, Huntsman, Wanhua and Mitsui as identified below, collectively, "Isocyanate Producers") for their anticompetitive behavior, including their conspiracy to reduce the global supply and fix the price for methylene diphenyl diisocyanate ("MDI") and toluene diisocyanate ("TDI") (collectively, "Isocyanates")—two chemicals used in making polyurethane. This conduct has enabled Isocyanate Producers to impose and maintain artificially high, supracompetive prices.

4. The Defendants' conspiracy had, and continues to have two interrelated components. *First*, Isocyanate Producers and other co-conspirators agreed among themselves to shut down plants and limit production of MDI and TDI products, causing a global drop in supply of Isocyanates. *Second*, Isocyanate Producers and other co-conspirators conspired to, and did, drive up prices in a series of identical or nearly identical price increases, ***often on the same day.***

5. MDI and TDI are precursor ingredients for the manufacture of polyurethanes. Polyurethanes, one of the most versatile plastic materials, are used in various consumer and industrial products including mattress foams, insulation, sealants, and footwear. The global market for polyurethanes is worth $53 billion. Defendants control 90% of the global MDI

market, and over 76% of the TDI market.

6. The Isocyanate Producers used and use their dominant position in the Isocyanates market to engage in clear anticompetitive conduct.

7. During the pre-conspiracy period, the Isocyanate Producers saw limited profits because market forces kept Isocyanate prices competitive. From 2012 to 2015, prices for MDI and TDI were relatively stable and/or declining. As noted by the Independent Chemical Information Service ("ICIS") in September of 2013, MDI prices in the United States were "steady, amid balanced supply and demand. No pricing announcements have been heard, suggesting prices will remain[] stable into October." In 2015, MDI and TDI prices actually *declined*, partly due to decreasing raw material costs and partly due to "increased competition owing to higher product availability."

8. By 2016, the Isocyanate Producers had grown weary of their sector's "poor business performance." To reverse the oversupply which hampered their profit margins, the Isocyanate Producers collectively carried out a plan to reduce the global supply of Isocyanates. During and throughout the Class Period, the Isocyanate Producers have colluded to rotate the permanent or temporary closure of manufacturing plants, as well as operating plants at reduced capacity.

9. Indeed, in the years prior to the Class Period, plant-related issues were rare, with only eight incidents reported for from 2012 to 2015. Plant disruptions and slowdowns have now become the Isocyanate Producers *de facto* business model: there have been more plant disruptions in ***each*** of the last three years than there were in the previous three ***combined***. The Isocyanate Producers have reported at least 9 plant closures or production limitations that resulted in reduced supply of MDI and TDI in 2016; at least 15 in 2017; and at least 8 (to date) in 2018. The tactic has not gone unnoticed by industry insiders. In 2016, the *Polyurethane Daily*, an

industry publication, characterized these supply disruptions as a "***tacit agreement on operation strategy***" by Isocyanate manufacturers.

10. After causing a global supply shortage through their concerted activity, the Isocyanate Producers imposed a series of lockstep price increases. During the Class Period, MDI prices have risen by an average of 40%, and TDI prices have risen by an average of 95%. Moreover, TDI and MDI Product prices have remained elevated for an unprecedented long period of at least two and a half years and counting. In one industry publication, insiders are quoted as saying that the "rise [in prices] is ***completely unprecedented in amplitude and speed***," and "***We've never seen anything like this duration***. We've seen these quantum of increases, but we've never seen these absolute prices before. We have found six-month spikes, six-month drops but nothing goes over a year."

11. The Isocyanate Producers' conspiracy has paid dividends. Defendants have experienced an enormous growth in profits since the conspiracy began. For example, several defendants reported a doubling of their year-on-year profits in 2017.

12. Investigators at DOJ's Antitrust Division have taken notice of the Isocyanate Producers' anticompetitive practices. In February of this year, DOJ served several of the Defendants with a grand jury subpoena in connection with a criminal investigation of price-fixing of MDI products. Defendants BASF and Covestro have admitted receiving subpoenas, and it is highly likely that Dow, Huntsman, Bayer, Wanhua, and Mitsui did (or will) as well.

13. Isocyanate Producers, enabled by a market "***ripe for collusion***", are recidivist violators of federal antitrust laws. *See In re Urethane Antitrust Litig*., 768 F.3d 1245, 1264 (10th Cir. 2014), cert. dismissed, 136 S.Ct. 1400 (2016). In the mid-2000s, several isocyanate producers were subject to criminal probes by DOJ that resulted in million-dollar plea

agreements. Civil plaintiffs also brought federal anti-trust cases, alleging an industry-wide conspiracy between 1999 and 2004. Defendant Dow lost a $1.06 billion jury verdict and Defendants Huntsman, BASF and Bayer Corporation (the predecessor of Covestro), among others, paid $140 million in settlements.[1]

14. The Isocyanate Producers' agreement to reduce output, and agreement to fix prices, are *per se* violations of the antitrust laws. Their manipulation of global Isocyanates supply allowed them to charge artificially inflated prices to purchasers, including the Plaintiff and proposed Class Members, during the Class Period. Accordingly, Plaintiff seeks relief for the damages they have suffered as a result of the Isocyanate Producers' violations of federal anti-trust law and for injunctive relief. Plaintiff asserts claims under the Sherman Act, 15 U.S.C. § 1 *et seq.*, and the Clayton Act, 15 U.S.C. § 12 *et seq.*

JURISDICTION AND VENUE

15. This action arises under Sections 1 and 3 of the Sherman Act, 15 U.S.C. §§ 1, 3 and Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15 and 26.

16. This Court has jurisdiction under 28 U.S.C. §§ 1331 and 1337 and Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15 and 26.

17. Venue is proper in this District pursuant to Sections 4, 12 and 16 of the Clayton Act, 15 U.S.C. §§ 15, 22 and 26 and 28 U.S.C. § 1391(b), (c) and (d). One or more of the Defendants, transacted business, were found, or had agents in the District, a substantial part of the events giving rise to Plaintiffs' claims arose in the District, and a substantial portion of the affected interstate trade and commerce described herein has been carried out in this District.

[1] Dow ultimately settled for $835 million prior to appeal to the Supreme Court. *See In re Urethane Antitrust Litig.*, Case No. 04-md-01616 (D. Kan).

THE PARTIES

Plaintiff

18. Plaintiff Bryn Hill Industries, Inc., a Pennsylvania corporation, manufactures custom molded polyurethane foam seating, for offices, medical/healthcare, vehicles, and theaters. During the Class Period, Bryn Hill purchased MDI and/or TDI from one or more Defendants and was injured as a result of Defendants' anticompetitive conduct.

Defendants

19. **BASF Defendants**. BASF AG is a German corporation with its principal place of business in Ludwigshafen, Germany. During the Class Period, BASF AG manufactured marketed, and sold Isocyanates in the United States, directly and through its predecessors, affiliates, parents and/or subsidiaries.

20. BASF Corporation is a Delaware corporation with its principal place of business in Florham Park, New Jersey. BASF Corporation is a wholly owned and controlled subsidiary of BASF AG. During the Class Period, BASF Corporation manufactured and sold Isocyanates to purchasers in the United States and elsewhere, directly or through predecessors, affiliates and/or subsidiaries.

21. BASF AG and BASF Corporation are jointly referred to herein as "BASF."

22. **Bayer and Covestro Defendants**. Bayer A.G. is a German corporation with its principal place of business in Leverkusen, Germany. Bayer A.G. has extensive operations in the United States, either directly or through its wholly owned and controlled subsidiaries and affiliates. During the Class Period, Bayer A.G. manufactured and sold Isocyanates to purchasers in the United States and elsewhere, directly or through its predecessors, affiliates and/or subsidiaries.

23. Bayer Corporation is an Indiana corporation with its principal place of business in

Pittsburgh, Pennsylvania. Bayer Corporation is a wholly owned subsidiary of Bayer A.G. During the Class Period, Bayer Corporation manufactured and sold Isocyanates to purchasers in the United States and elsewhere, directly or through its predecessors, affiliates and/or subsidiaries. Bayer A.G. controls Bayer Corporation both generally and with respect to the conduct of Bayer Corporation in furtherance of the unlawful acts alleged in this complaint. Bayer A.G. and Bayer Corporation are collectively referred to as "Bayer."

24. Covestro AG is a German corporation with its principal place of business in Leverkusen, Germany. Covestro AG was established as a legally independent company on September 1, 2015, but its roots can be traced back much earlier: it is the successor company to Bayer MaterialScience, Bayer AG's chemicals and plastics unit. Covestro AG has extensive operations in the United States, either directly or through its wholly owned and controlled subsidiaries and affiliates. During the Class Period, Covestro AG manufactured and sold Isocyanates to purchasers in the United States and elsewhere, directly or through its predecessors, affiliates and/or subsidiaries.

25. Covestro LLC is a Delaware corporation with its principal place of business in Pittsburgh, Pennsylvania. It is a wholly owned subsidiary of Covestro AG. On September 1, 2015, Covestro LLC was created as a spin-off from Bayer MaterialScience LLC, although it remained a wholly owned subsidiary of Bayer A.G. As of February 2017, Bayer A.G. held approximately 64% of Covestro LLC. As of September 2017, Bayer A.G. held less than 25% of Covestro LLC. Bayer A.G. sold its remaining interest in Covestro LLC in May 2018 (aside from Bayer's pension fund). During the Class Period, Covestro LLC manufactured and sold Isocyanates to purchasers in the United States and elsewhere. Covestro AG controls Covestro LLC both generally and with respect to the conduct of Covestro LLC in furtherance of the

unlawful acts alleged in this complaint. Covestro AG and Covestro LLC, along with the Bayer entities discussed above, are collectively referred to as "Covestro."

26. **Dow Defendant**. Dow Chemical Company is a Delaware corporation with its principal places of business in Midland, Michigan (for The Dow Chemical Company subsidiary) and in Wilmington, Delaware (for the E. I. du Pont de Nemours and Company subsidiary). DowDuPont Inc. was formed on August 31, 2017 as a result of a merger of equals between The Dow Chemical Company and E. I. du Pont de Nemours and Company. DowDuPont Inc. has extensive operations in the United States, either directly or through its wholly owned and controlled subsidiaries and affiliates. On and after August 31, 2017, DowDuPont Inc. manufactured and sold Isocyanates to purchasers in the United States and elsewhere, directly or through its predecessors, affiliates and/or subsidiaries.

27. **Huntsman Defendants**. Huntsman International LLC ("Huntsman") is a Delaware corporation with its principal place of business in The Woodlands, Texas. Huntsman LLC is a wholly owned subsidiary of Huntsman Corporation. During the Class Period, Huntsman LLC manufactured and sold Isocyanates to purchasers in the United States and elsewhere. Huntsman LLC is referred to as "Huntsman."

28. **Wanhua Defendants**. Wanhua Chemical Group Co., Ltd. is a Chinese corporation with its principal place of business in Yantai, China. Wanhua Chemical Group Co., Ltd. has extensive operations in the United States, either directly or through its wholly owned and controlled subsidiaries and affiliates. During the Class Period, Wanhua Chemical Group Co., Ltd. manufactured and/or sold Isocyanates to purchasers in the United States and elsewhere, directly or through its predecessors, affiliates and/or subsidiaries.

29. Wanhua Chemical (America) Co., Ltd. is a Nevada corporation with its principal

place of business in Newtown Square, Pennsylvania. It is a wholly owned subsidiary of Wanhua Chemical US Holding Inc. During the Class Period, Wanhua Chemical (America) Co., Ltd. manufactured or sold Isocyanates to purchasers in the United States and elsewhere.

30. Wanhua Chemical Group Co., Ltd. and Wanhua Chemical (America) Co., Ltd. are collectively referred to as "Wanhua."

31. **Mitsui Defendants**. Mitsui Chemicals America, Inc. ("Mitsui America") is a Delaware corporation with its principal place of business in Rye Brook, New York. During the Class Period, Mitsui America manufactured and/or sold Isocyanates to purchasers in the United States and elsewhere.

32. Mitsui Chemicals, Inc. ("Mitsui Japan") is a Japanese corporation with its principal place of business in Tokyo, Japan. Mitsui Japan has extensive operations throughout the United States, either directly or through its wholly-owned and controlled subsidiaries and affiliates. During the Class Period, Mitsui Japan manufactured and/or sold Isocyanates to purchasers in the United States and elsewhere.

33. MCNS (a.k.a. Mitsui Chemicals & SKC Polyurethanes, Inc.) is a Korean and Japanese corporation with its principal place of business in Seoul, Korea. MCNS was established in July 1, 2015 as an equally-owned joint venture between Mitsui Japan and South Korea-based SKC Polyurethanes Inc. MCNS has extensive operations throughout the United States, either directly or through its wholly-owned and controlled subsidiaries and affiliates. During the Class Period, MCNS manufactured and/or sold Isocyanates to purchasers in the United States and elsewhere.

34. MCNS Polyurethanes USA Inc. ("MCNS USA") is a Georgia corporation with its principal place of business in Covington, Georgia. During the Class Period, MCNS USA

manufactured or sold Isocyanates to purchasers in the United States and elsewhere.

35. Mitsui Japan, MCNS, and MCNS USA are collectively referred to as "Mitsui."

UNNAMED CO-CONSPIRATORS

36. Various other entities and individuals not named as Defendants in this Complaint participated as co-conspirators in the acts complained of and performed acts and made statements that aided and abetted and furthered the unlawful conduct alleged herein.

37. Whenever in this Complaint reference is made to any act, deed or transaction of any corporation, the allegation means that the corporation engaged in the act, deed or transaction by or through its officers, directors, agents, employees or representatives while they were actively engaged in the management, direction, control or transaction of the corporation's business or affairs.

CLASS ACTION ALLEGATIONS

38. The Plaintiff brings this action as a class action under Rules 23(a) and 23(b)(3) of the Federal Rules of Civil Procedure, on behalf of itself and all others similarly situated. The "Class" is defined as:

> All persons or entities residing in the United States that purchased, directly from Defendants (including through controlled subsidiaries, agents, affiliates and/or joint ventures), methylene diphenyl diisocyanate products and/or toluene diisocyanate products (collectively, "Isocyanates") at any time during the period January 1, 2016 through the present (the "Class Period"). Excluded from the Class are the Defendants and their employees, affiliates, parents, and subsidiaries and any judicial officers and staff presiding over this action.

39. The Class is so numerous that joinder of all members is impracticable. While the exact number of Class members is unknown at this time, the Plaintiff is informed and believes that there are hundreds, if not thousands, of geographically dispersed Class members who purchased Isocyanates directly from the Defendants during the Class Period.

40. Plaintiff's claims are typical of the claims of the other members of the Class. Plaintiff and the members of the Class sustained damages arising out of the Defendants' common course of conduct in violation of law as complained herein. The injuries and damages of each member of the Class were directly caused by the Defendants' wrongful conduct.

41. Plaintiff will fairly and adequately protect the interests of the members of the Class and has retained counsel competent and experienced in class action litigation, including antitrust class action litigation.

42. Common questions of law and fact exist as to all members of the Class which predominate over any questions affecting solely individual members of the Class. Among the questions of law and fact common to the Class are:

a. Whether Defendants and their co-conspirators engaged in a combination and conspiracy among themselves to fix, raise, maintain and/or stabilize prices of Isocyanates sold in the United States and/or its territories

b. The identity of the participants of the conspiracy; the duration of the conspiracy and the acts carried out by Defendants and their co-conspirators in furtherance of the conspiracy;

c. The duration of the alleged conspiracy and the acts carried out by Defendants and their co-conspirators in furtherance of the conspiracy;

d. Whether the conduct of Defendants and their co-conspirators, as alleged in this Complaint, caused injury to the business or property of the Plaintiff and the other members of the Class;

e. Whether the conspiracy violated Sections 1 and 3 of the Sherman Act (15 U.S.C. §§ 1, 3);

f. The effect of the alleged conspiracy on the prices of Isocyanates sold in the United States during the Class Period; and

g. The appropriate measure of damages for the injury sustained by Plaintiff and other members of the Class as a result of Defendants' unlawful activities.

43. A class action is superior to other available methods for the fair and efficient adjudication of this controversy because joinder of all Class members is impracticable. The prosecution of separate actions by individual members of the Class would impose heavy burdens upon the courts and Defendants, and would create a risk of inconsistent or varying adjudications of the questions of law and fact common to the Class. A class action, on the other hand, would achieve substantial economies of time, effort and expense, and would assure uniformity of decision as to persons similarly situated without sacrificing procedural fairness or bringing about other undesirable results.

44. The interest of members of the Class in individually controlling the prosecution of separate actions is theoretical rather than practical. The Class has a high degree of cohesion, and prosecution of the action through representatives would be unobjectionable. The amounts at stake for Class members, while substantial in the aggregate, are not great enough individually to enable them to maintain separate suits against Defendants. Plaintiff does not anticipate any difficulty in the management of this action as a class action.

FACTUAL ALLEGATIONS

A. Isocyanates Form A Crucial Part of a Multi-Billion Dollar Market.

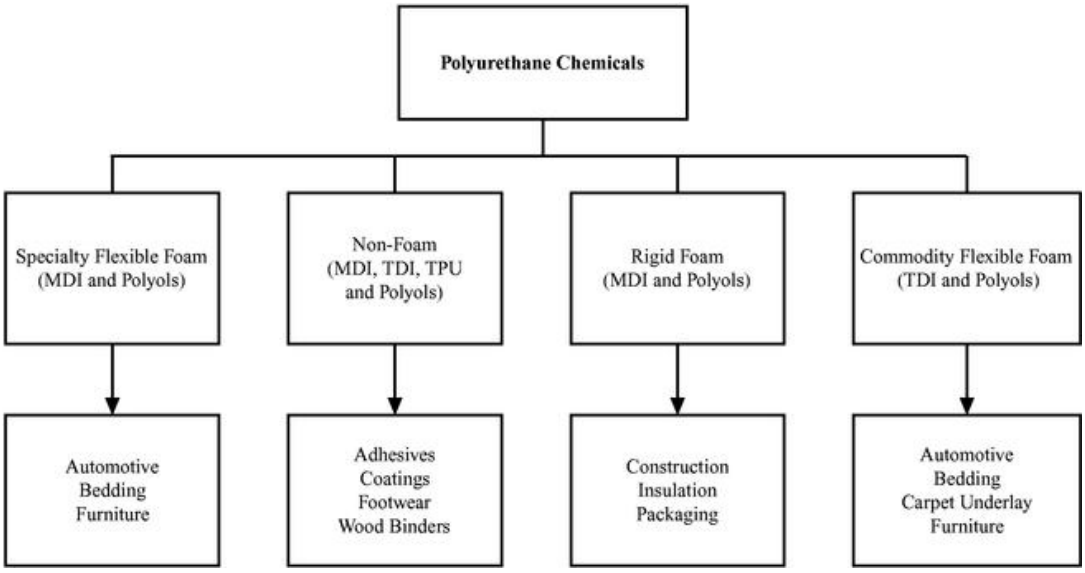
45. Polyurethane chemistry was first pioneered by Bayer's Dr. Otto Bayer over fifty years ago. Polyurethane is a leading member of the wide-ranging and highly diverse family of plastics. Isocyanates —MDI and TDI—are chemicals predominantly used in the production of

polyurethane. Manufacturers make polyurethane by reacting polyols and Isocyanates, both products derived from crude oil.

46. There are many types of polyurethane products in the marketplace, with foams representing the largest sector of the polyurethane industry. Polyurethane foams take two forms: flexible and rigid. Flexible foam is primarily used for cushioning, while rigid foam is used mainly for insulation.

47. Isocyanates are used in variety of consumer and industrial applications. For example, Isocyanate-based foams are used in the thermal insulation of buildings, refrigerators, household furniture, automotive seating, packaging, cushioning, shoe soles, and medical devices. The major application of isocyanate is rigid foam, which accounts for a majority of their usage, followed by flexible foam, paints & coatings, adhesives & sealants, elastomers & binders, and other applications.

Figure 1: Polyurethane chemicals are used in a wide array of consumer and industrial products.



48. The polyurethane market is a $53 billion global market that is projected to grow 7% per year for the next decade.

49. The global production of MDI has increased significantly in the last decade. The industry produced 3.3 million metric tons in 2005, 4.4 million metric tons in 2010, and 6.4 million metric tons in 2016.

50. In 2013, the global production capacity for TDI was estimated to be 2.98 million metric tons, and demand for TDI has grown substantially since then, in part because it is used in the creation of flexible polyurethane foam, which has become an increasingly popular product.

51. Defendants have, and had at all times throughout the Class Period, a dominant market share of this multi-billion dollar market, and Defendants refer to themselves as global "leaders" in this market.

B. The Isocyanates Market is Dominated by Recidivist Anti-Trust Violators

52. Isocyanates Producers are recidivist anti-trust violators. As demonstrated by prior criminal and civil cases, Isocyanate Producers have previously conspired to fix MDI and TDI prices, as well as other commodity chemical products.

53. In March 2004, a chemical company, Chemtura Corp., known at the time as Crompton Corp., plead guilty to fixing the price of rubber products and paid a $50 million fine for participating in what the DOJ called an international conspiracy to fix prices. After its plea, DOJ granted Crompton conditional amnesty in connection with its investigation into price-fixing of urethane products.

54. In July 2004, Bayer AG plead guilty to one count of a felony charge for violating Section 1 of the Sherman Act. The indictment alleged that Bayer AG conspired with unnamed rubber chemical producers to suppress and eliminate competition for certain rubber chemicals sold in the United States and elsewhere from mid-1995 to 2001. As part of the plea, Bayer AG agreed to pay a $66 million criminal fine.

55. In September 2004, as a result of cooperation from Crompton, the DOJ filed a criminal information against Bayer alleging that the company participated in a conspiracy to fix the price of aliphatic polyester polyols, a compound used in the making of polyurethane. *United States v. Bayer Corp.*, No. CR 04-0318 VRW (N.D. Cal.). DOJ alleged that Bayer and its co-conspirators carried out the conspiracy by participating in conversations and meetings to discuss prices, agreeing to raise and maintain those prices, and then pricing in accordance with this agreement. On May 24, 2005, Bayer Corporation plead guilty and paid a $33 million fine for participating in a price fixing conspiracy of such polyester polyols from 1998 to 2002.

56. In August 2004, following the Crompton guilty plea, several class action lawsuits were filed against the manufacturers of MDI and TDI. The cases were centralized by the Judicial Panel on Multidistrict Litigation ("JPML") in the District of Kansas. *In re Urethane Antitrust Litig.*, 333 F.Supp.2d 1379 (J.P.M.L. 2004). The defendants named in these actions included Bayer, Chemtura, Dow, BASF and Lyondell.

57. In 2005, additional class cases were filed that alleged price-fixing conspiracy claims against Bayer, Chemtura, Dow, BASF and others for a price-fixing conspiracy as to MDI, TDI, and polyether polyols. After the JPML sent these cases to the district court in Kansas, the two sets of cases proceeded on distinct tracks except for discovery. The polyester polyol cases resulted in settlements and did not go to trial. Similarly, in the MDI and TDI cases, Bayer, BASF, and Hunstman agreed to a nearly $140 million class action lawsuit settlement. Dow was the only defendant not to settle.

58. On February 20, 2013, following a four-week trial, a jury returned a $400 million verdict against Dow for its participation in a conspiracy to fix the prices of certain chemicals used to manufacture polyurethanes. After trebling and assessment of costs, the judgment totaled

$1.06 billion. In the *In re Urethane Antitrust Litig*., 768 F.3d 1245, 1264 (10th Cir. 2014), cert. dismissed, 136 S.Ct. 1400 (2016), the United States Court of Appeals for the Tenth Circuit affirmed that judgment.

59. In affirming the jury verdict, the Tenth Circuit said there was undisputed evidence of "the existence of an agreement to coordinate price-increase announcements and try to make them stick" and "the existence of evidence involving coordination in announcing price increases." *In re Urethane Antitrust Litig.*, 768 F.3d at 1263.

60. The Tenth Circuit also noted there was "'a widespread pattern of communication' among the top executives of the defendant companies . . . [Plaintiff's expert] was struck not only by the frequency and secrecy of these communications but also by their timing, for the contacts frequently occurred within days of a lockstep price-increase announcement. This proximity suggested that the price-increase announcements had been coordinated." *Id*. at 1265 (citation omitted).

61. The Tenth Circuit agreed that the evidence showed the industry was "***ripe for collusion***," given that market power was "concentrated in the hands of only a handful of firms," "the market had high barriers to entry," the products at issue were "homogeneous," there "were no close product substitutes available to customers," "there was excess capacity for MDI [and] TDI" products, and trade associations existed that provided an opportunity to engage in price-fixing. *Id*.

62. As discussed at length below, all the same factors that made the industry "ripe for collusion" exist today.

63. In February of 2016, Dow settled the case for $835 million.

C. Isocyanate Producers Conspired to Artificially Reduce Supply and Raise Prices.

64. The investigations, pleas, cases, and settlements discussed above did not deter an industry dominated by recidivist anti-trust violators from once again conspiring to fix prices. In the beginning of 2016, shortly before the Dow settlement was completed, the Isocyanate Producers entered a new conspiracy. Defendants from *Urethanes*, joined by Wanhua and Mitsui, entered an agreement to impose artificially inflated, supracompetive prices for Isocyanate products.

65. The core of the conspiracy between the Isocyanate Producers was an overarching agreement to reduce output by closing or suspending operations at several manufacturing plants around the world, thereby causing a global shortage in the supply of MDI and TDI, and an agreement to raise prices. Defendants capitalized on the tightened supply by engaging in lockstep price increases, driving up prices in the face of market forces that would have otherwise pushed prices down.

i. Prices were relatively stable and/or declining in the years leading up to the conspiracy.

66. From 2012 to 2015, in the years leading up to the conspiracy, MDI and TDI prices were relatively stable and/or declining. By 2014 Isocyanate Producers' profits began to "***bottom out***" due to "***a rapid deterioration in market conditions caused by temporary oversupply***." Numerous reports from the Isocyanate Producer themselves and industry publications document how the pre-conspiracy market was characterized by low and/or stable prices caused by high supply and increasing operational capacity:

a. In 2013, ICIS noted that "US MDI prices are steady, amid balanced supply and demand. No pricing announcements have been heard, suggesting prices will

remains stable into October."[2]

b. In its 2014 Annual Report, Bayer reported that "Selling prices [for Polyurethanes] overall were below the prior-year level. ***Volumes of diphenylmethane diisocyanate (MDI) and toluene diisocyanate (TDI) improved, while selling prices receded***."

c. In its 2014 Annual Report, Hunstman noted that "The increase in revenues in [their] Polyurethanes segment for 2014 compared to 2013 was primarily due to ***higher sales volumes*** and improved sales mix, partially ***offset by lower average selling prices***."[3]

d. Covestro's Investor Presentation document dated May 2016 revealed that "***EBITDA margin [for MDI and TDI] bottom[ed] out in 2014***; working on improving results."

e. In 2015, Covestro explained in its Annual Report that TDI prices decreased in 2014 partly due to "***increased competition owing to higher product availability***."

f. Mitsui, in its 2014 Annual Report, asserted that its polyurethane raw materials products were among the "areas in which ***profitability must improve***."[4] The Report also noted that, in part because of a "***prolonged slump in … the market price for TDI***," earnings from "polyurethane materials declined."[5]

g. In a 2015 call with investors, Peter Hunstman, the CEO of Hunstman stated that, "***I'd say that we are seeing a softening taking place in MDI pricing***."[6]

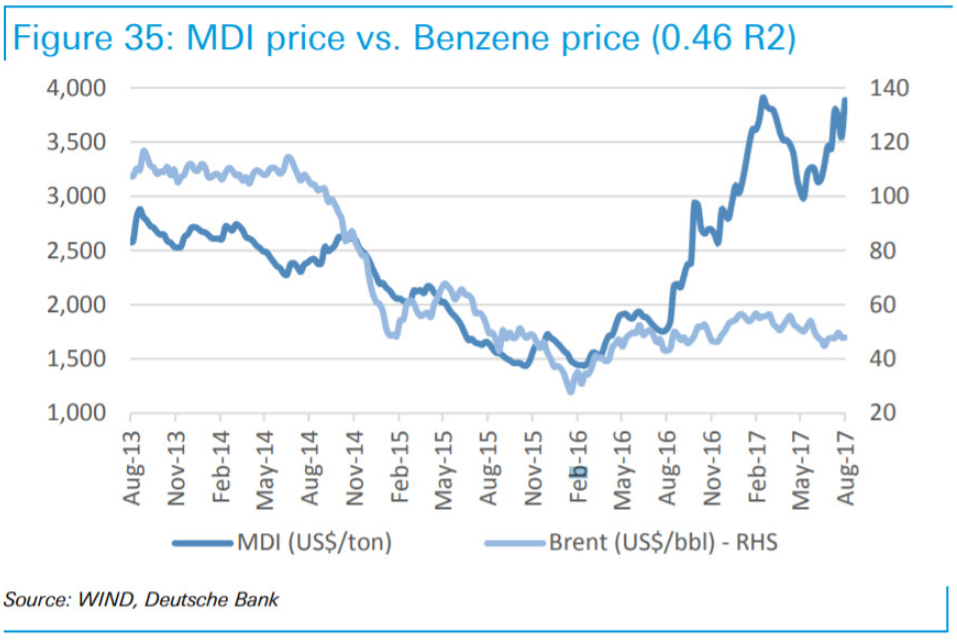
h. In its 2015 Annual Report, BASF, stated that they "***anticipate[d] intense***

[2] https://www.icis.com/resources/news/2013/09/29/9710138/chemical-profile-us-mdi/
[3] http://www.annualreports.com/HostedData/AnnualReportArchive/h/NYSE_HUN_2014.pdf (page 16)
[4] https://www.mitsuichem.com/jp/ir/library/ar/pdf/en_ar14_all.pdf (page 20)
[5] https://www.mitsuichem.com/jp/ir/library/ar/pdf/en_ar14_all.pdf (page 29)
[6] https://everchem.com/urethane-comments-from-huntsman-investors-call/

competitive pressure, especially in the markets for MDI, TDI, acrylic acid, and caprolactam." The Report also noted that "[i]ncome from operations before special items ***declined considerably, largely influenced by lower margins for TDI***."[7]

i. In Mitsui Chemicals' 2016 Annual Report, the company stated that the "Polyurethane segment product earnings could be ***adversely affected by a rapid deterioration in market conditions caused by temporary oversupply due to an increase in production facilities at rival firms***."[8]

j. A Deutsche Bank Market Research Report on Wanhua showed that MDI prices during the pre-conspiracy period were steadily declining relative to benzene, a key raw material in the production of MDI.[9]

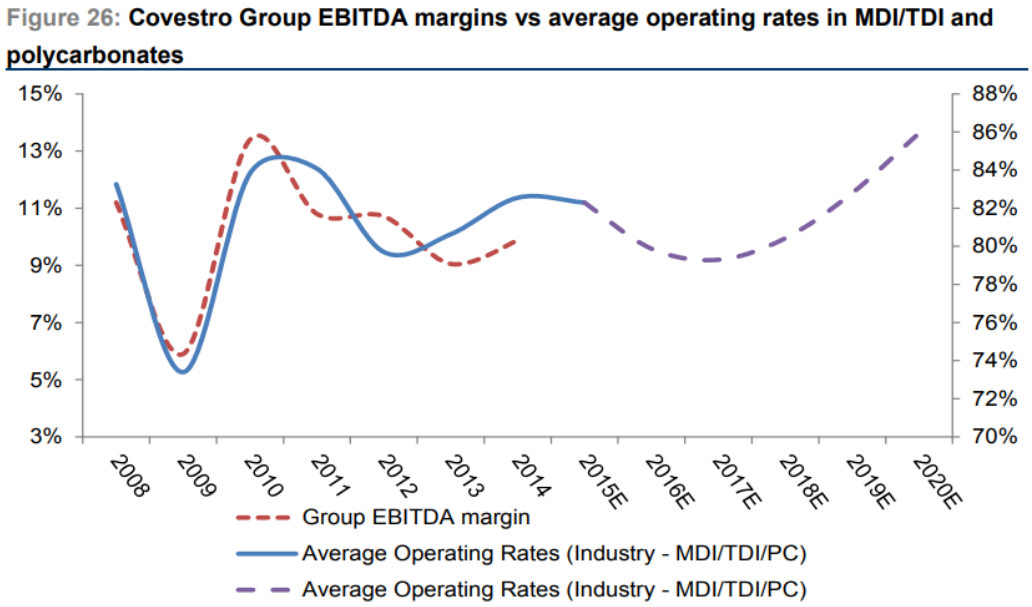


k. In an August 2015 report, the ICIS explained that "***US TDI prices were stable***

[7] BASF's 2015 Management's Report (page 68)
[8] https://www.mitsuichem.com/jp/ir/library/ar/pdf/en_ar16_all.pdf (page 86)
[9]

early in the first half of the third quarter after two decreases of 5 cents/lb each assessed during the first quarter, and a 5 cent/lb decrease in early July 2015, totaling a 15 cent/lb drop." The ICIS also noted that "***US MDI prices have remained stable*** into the third quarter, after the 10 cent/lb price drop assessed during the first quarter."[10]

l. A 2016 Credit Suisse Report on Covestro noted that the industry's operating rates were trending steadily upward from around 2012 through 2015.[11] The report also opined that a key risk for the firm was the "***risk of overcapacity entering the market*** … which would impact industry utilization [sic] rates and pricing."



ii. Defendants engaged in a conspiracy to reduce global supply of TDI and MDI.

67. Throughout the Class Period, Defendants agreed to implement, coordinate, and rotate chemical plant and factory closings, often under the phony excuse of "force majeure"

[10] https://www.icis.com/resources/news/2015/08/28/9918506/think-tank-us-polyurethanes-market-steady-into-q3/

[11] https://research-doc.credit-suisse.com/docView?language=ENG&format=PDF&source_id=csplusresearchcp&document_id=806833650&serialid=vouxVysEDDgARqGBRT%2FV25BuUt29fO2S3QU%2BOq%2B7RVI%3D

clauses that they claimed allowed them to invalidate prior purchase orders. These closings were done for pretextual reasons. Examples of these closings include, but are not limited to:

a. In March 2016, Mitsui Chemicals began running its Omuta, Fukuoka plant at 50% capacity.[12] The unit had the capacity to produce 60,000 tonne/year of MDI and 120,000 tonne/year of TDI. The plant's run rates were cut because of purported "technical problems," sources said without disclosing further details. Two months later, in May 2016, Mitsui Chemicals accelerated the closure of its MDI plant in Omuta, Japan to May from the originally scheduled December 2016 date."[13] Mitsui's plant closure was not a rational business decision, especially since demand for MDIs was increasing and it takes many years (and billions of dollars) to plan, obtain permits, design, construct and fully operate an MDI plant.

b. In May 2016, Covestro declared force majeure on its ability to supply TDI products in North America. Covestro claimed that an "equipment failure at Covestro's Baytown, Texas, manufacturing facility caused the TDI supply impairment."[14]

c. The next month, on June 10, 2016, BASF declared a force majeure for MDI-based products supplied out of their plant in Yeosu, Korea, claiming to have "experience an unforeseeable operational incident."[15]

d. Just a few months later, on October 6, 2016, Covestro announced that its "European MDI and TDI facilities [we]re operating at reduced capacity due to a

[12] https://www.icis.com/resources/news/2016/03/23/9981400/japan-mcns-s-omuta-mdi-and-tdi-plants-running-at-50-/

[13] http://test.ccf.com.cn/newscenter/newsview.php?Class_ID=600000&Info_ID=20151026114 ; https://www.icis.com/resources/news/2016/05/11/9996685/japan-s-mcns-permanently-closes-omuta-mdi-unit/

[14] https://www.icis.com/resources/news/2016/05/17/9999194/covestro-declares-force-majeure-on-n-america-tdi/

[15] https://www.basf.com/cn/en/company/news-and-media/news-releases/cn/2017/12/mdi.html

production outage at a supplier of nitric acid."[16] Later, on October 24, 2016, "Covestro warned that production … would continue to run at reduced levels because outages at a supplier [could not] be overcome before Dec. 11."[17] In fact, the force majeure persisted until December 27, 2016.[18] Reuters noted that the "setback add[ed] to a supply squeeze in the market for TDI."

e. In the fall of 2016, Wanhua shut down its Yantai, China factory for alleged maintenance reasons.[19]

f. Shortly after, on November 23, 2016, Hunstman issued a "strict sales control" on its Rozenburg MDI plant in the Netherlands following an undisclosed "production issue." At the time, "[s]upply was already short due to Germany's Covestro declaring force majeure across all isocyanate production in Europe." [20]

g. In mid-March 2017, Huntsman again shut down its 400,000 tonne/year Rozenburg facility for a period of about 37 days for a "scheduled turnaround." Later, when Huntsman began recommencing production, it experienced an "unforeseen technical issue" that kept the plant offline even longer.[21]

h. The next month, on April 25, 2017, Covestro declared a force majeure after an "unforeseeable production issue" at the firm's Brunsbuttel site in Germany, which has a nameplate capacity of 200,000 tonnes/year according to the ICIS

[16] https://utech-polyurethane.com/news/covestro-mdi-and-tdi-force-majeure-ongoing/
[17] https://www.reuters.com/article/covestro-forcemajeure-idUSF9N1C400D
[18] http://www.rubbernews.com/article/20170103/NEWS/170109992/covestro-lifts-force-majeure-on-polyurethane-raw-materials
[19] http://doxuchem.com/article/doc/view/37.html
[20] https://www.icis.com/resources/news/2016/11/23/10057004/us-huntsman-imposes-strict-sales-controls-on-rozenburg-mdi-plant/
[21] https://www.icis.com/resources/news/2017/05/04/10103468/us-s-huntsman-has-technical-issue-during-netherlands-mdi-unit-restart/

Plants and Projects database.[22]

i. A few weeks later, on May 16, 2017, Wanhua Chemical shut down its MDI plant in Ningbo, China for "scheduled maintenance."[23] "Wanhua's plant in Ningbo features the ***world's largest MDI production capacity***, 1.2 million metric tons."

j. In August of 2017, BorsodChem, Wanhua's European subsidiary, announced a force majeure on production of MDI from its plant in Kazincbarcika, Hungary, due to an "unforeseen technical problem at one critical raw material supplier."

k. That same month, on August 30, 2017, Covestro declared force majeure on its MDI and TDI plants located in Baytown and Channelview, Texas due to flooding caused by Tropical Storm Harvey. These Texas facilities can produce 340,000 tons/year of MDI and 220,000 tons/year of TDI. Covestro did not lift its force majeures until more than a month later for its MDI plants and until two months later for its TDI plants. This conduct is inherently suspicious since Huntsman confirmed on September 3, 2017 that "[a]ll Huntsman sites in the regions affected by Harvey weathered the storm safely, with no safety incidents to our associates . . . ."

l. Later in the year, on December 12, 2017, BASF declared a force majeure for the production of MDI from its Chongqing plant in China "due to a supply shortage of natural gas."

m. At the same time, Wanhua ***again*** shut down its MDI production in its Ningbo factory on December 1, 2017 (for its "first phase device") and December 16, 2017

[22] https://www.icis.com/resources/news/2017/04/26/10100808/germany-s-covestro-declares-force-majeure-due-to-mdi-brunsbuttel-site-issues/

[23] https://www.icis.com/resources/news/2017/05/17/10107107/china-s-wanhua-shuts-800-000-tonne-year-mdi-unit-for-maintenance/

(for its "second phase device") each for 45 to 50 days for an "overhaul."

68. In BASF's Ludwigshafen, Germany plant, construction began long before the Class Period and BASF opened it in November 2015. But, as one report noted, it hardly progressed beyond a brief "trial operation period," with technical delays causing delays and shutdowns. As of November of 2016, the entire plant was taken offline due to a "technical defect," and it stayed closed for months. In March of 2017, BASF announced that it would restart the plant "in a few weeks" after replacing a damaged reactor. In May of 2017, BASF said the repair was done but was doing "test runs" on the new reactor. BASF then restarted the plant in late May 2017, but announced that it was running at "reduced output" because the newer reactor was smaller than the original one. Then, in October of 2017, BASF said it identified "quality differences" from the Ludwigshafen plant and both stopped producing TDI and recalled shipped TDI. In January 2018, BASF announced it had shut down Ludwigshafen completely and would resume it "in the course" of the second quarter. All of these reasons for keeping the plant closed were pretextual and part of the Defendants' conspiracy to reduce output.

69. ***The number of production-plant disruptions that have occurred since the conspiracy began is atypical for the Isocyanates industry and constitutes a clear departure from prior norms***. In the pre-conspiracy period from 2012 to 2015, there were a total of eight MDI or TDI plant production-related issues—one in 2012, three in 2013, none in 2014, and four in 2015. Since the conspiracy began, however, the Isocyanate Producers have reported at least 9 plant closures or production limitations that resulted in reduced supply of MDI and TDI in 2016, at least 15 plant closures or production limitations in 2017, and at least 8 plant closures or production limitations thus far in 2018. In other words, ***there have been more plant closures each year since the conspiracy began than in the previous three years combined***.

70. The aberrational nature of the plant closures and operation suspensions has not gone unnoticed. In July 2016, an industry monitor, the *Polyurethane Daily*, characterized the supply disruptions as a "***tacit agreement on operation strategy***" by manufacturers.[24]

71. The sudden incidence of plant closures and production limitations among the Isocyanate Producers is unprecedented and cannot be explained by mere coincidence. Rather, it is the result of an illegal agreement among the Defendants.

72. Defendants sometimes buy Isocyanates from each other. For example, in June of 2016, a news report stated that Wanhua was selling TDI to BASF and Mitsui during the shutdowns due to "malfunctions" at their plants. Similarly, in April of 2017, Huntsman confirmed on an investors' call that Huntsman was buying product from its competitors. Buying Isocyanates from one another also allowed Defendants to collaborate and police their pricing agreements.

73. As a result of the concerted reduction in output in the Defendants' MDI and TDI facilities, direct purchasers of MDI and TDI products faced a supply shortage that has now been ongoing for over two and a half years, which has profited Defendants.

iii. Isocyanate Producers leveraged the artificial shortage they created to implement lockstep price increases.

74. During the Class Period, the Isocyanate Producers capitalized on the artificial shortage they created by imposing a series of identical or nearly identical price increases, ***often on the same day***. The price increases were implemented to customers worldwide, including those in the United States. Defendants have maintained their supracompetitive MDI and TDI prices at elevated levels to this day.

75. MDI and TDI products' consumers have been taken aback by the unprecedented

[24] https://everchem.com/chinese-mdi-market-overview/

nature of the price hikes. As reported in *Rubber News* on June 21, 2017, the sudden supply reduction has led to price increases that are "***completely unprecedented in amplitude and speed***." [25]

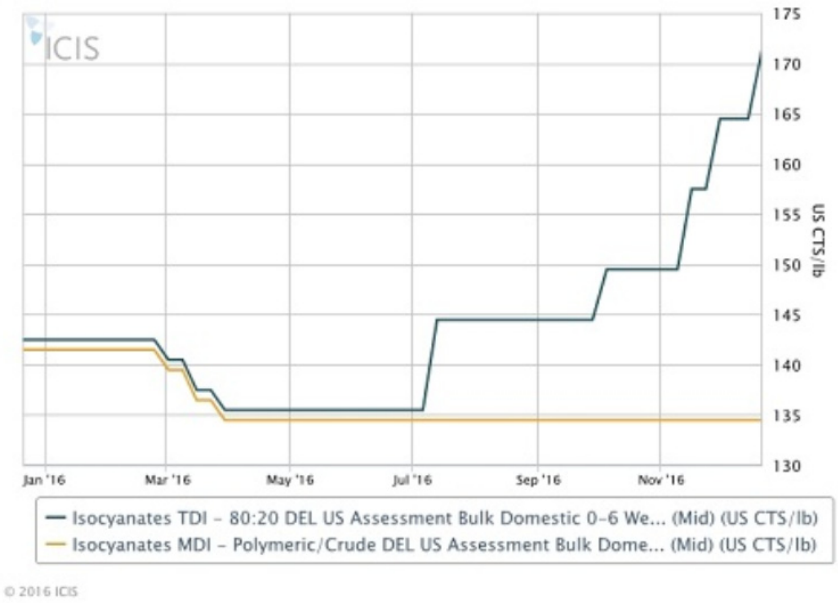
76. Indeed, Jon Cheele, managing director of Vita Cellular Foams, observed "***We've never seen anything like this duration***. We've seen these quantum of increases, but we've never seen these absolute prices before. We have found six-month spikes, six-month drops but nothing goes over a year."

77. In January 2017, Rachel Uctas, a senior polyurethanes consultant at Tecnon Orbichem put it as follows, "TDI supply was impacted by a series of production problems, the most significant and the longest lasting being the delay in the start up of BASF's new 300 ktpa TDI plant in Ludwigshafen. The plant has been beset with a variety of technical issues, and in January 2017, the plant remains down. Whilst starting up a TDI plant can be a notoriously tricky process, ***the delay has been exceptionally long, and as a result of this issue, combined with several other production problems at other global producers, TDI prices have rocketed in all regions***."[26]

78. In January 2017, the ICIS reported that "[i]n the TDI market, tight supplies have resulted in ***significant upward movement in prices in both the US and in other major global markets***." The article contained the following chart illustrating the price surge:

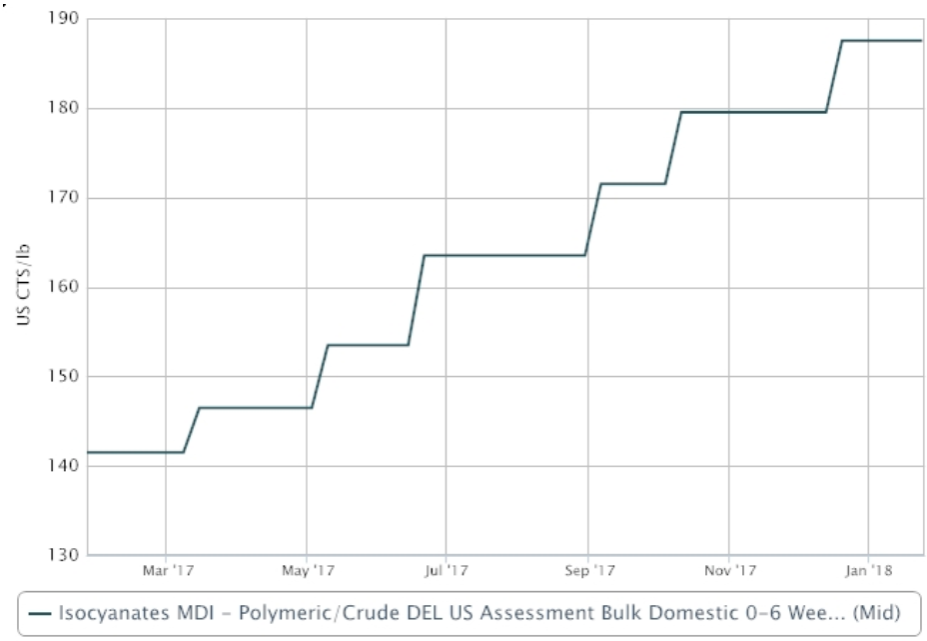
[25] http://www.rubbernews.com/article/20170621/NEWS/170629982/high-diisocyanate-prices-could-slow-polyurethane-growth

[26] https://orbichem.wordpress.com/2017/01/27/which-direction-for-pu-raw-materials-in-2017/. Tecnon OrbiChem describes itself as "a world leader in providing data and analysis to the petrochemical industry."



79. Later, the ICIS noted that in 2018, "US buyers ha[ve] been hoping to see stable pricing, or possibly even some price relief, on MDI at the start of the year ***following the significant run-up in prices that occurred in 2017 owing to persistently tight supply***." ICIS also provided the following graph demonstrating a significant upward trajectory for US MDI prices:[27]

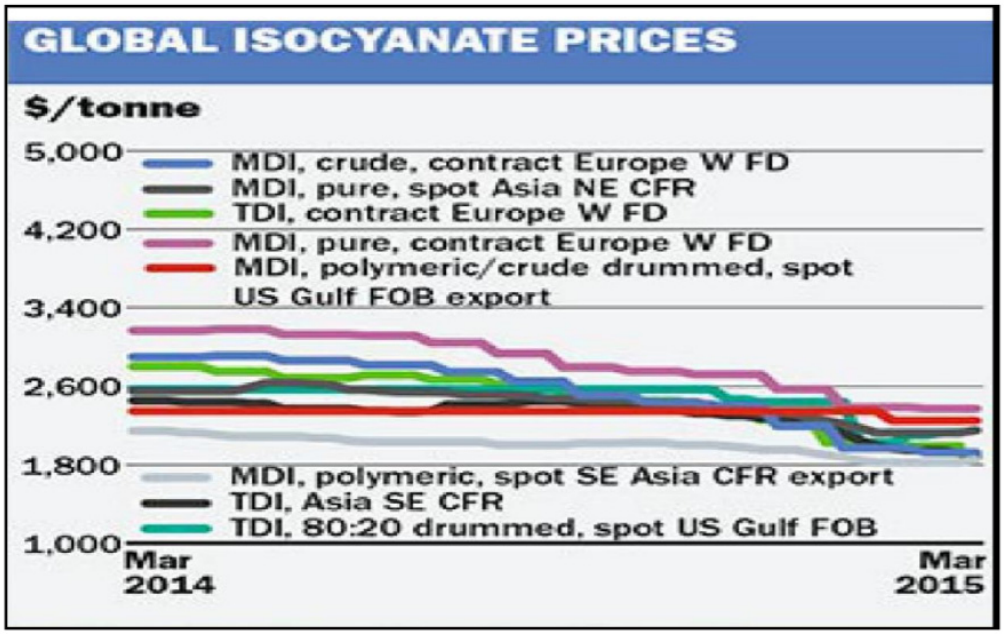
[27] https://www.icis.com/resources/news/2018/01/25/10186895/basf-declares-force-majeure-on-us-monomeric-mdi/



80. The upward trajectory of MDI and TDI products' prices that began in 2016 stands in stark contrast to the pre-conspiracy prices. The charts below illustrate the difference between the MDI and TDI pricing trends before and after the conspiracy began.[28]

[28] Converting units: TDI cost around $2,998/ton on June 1, 2016 and around $4,960/ton on September 6, 2017; MDI cost around $2,976/ton on June 1, 2016 and $3,747/ton on September 6, 2017.

PRICING KNOWN PRE-CONSPIRACY



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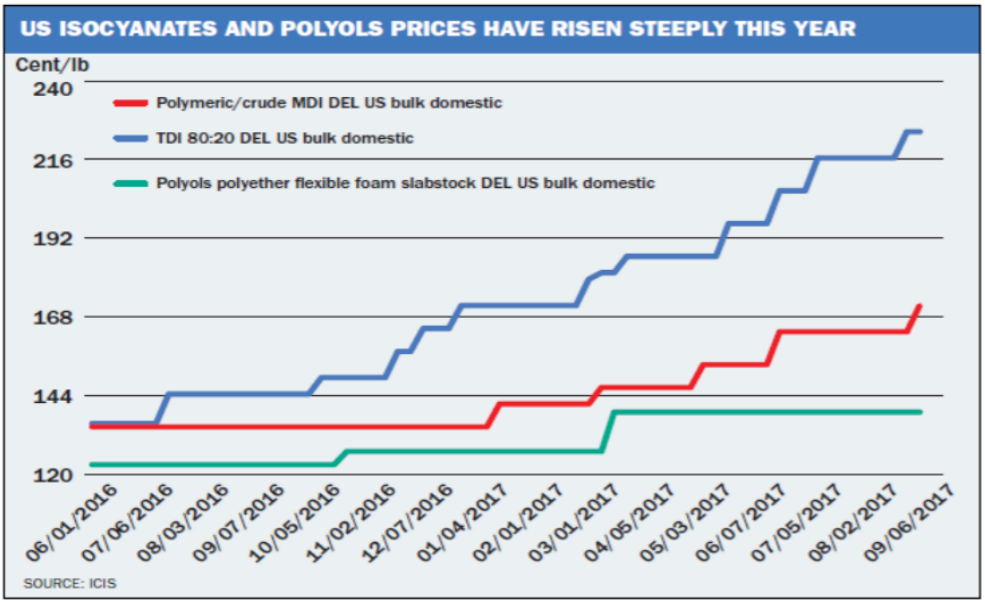


81. Joyce Grigorey, a polyurethane consultant for Tecnon Orbichem, reported that, "The MDI and TDI markets have been plagued by a series of production upsets, which have resulted in ***prices being pushed to ever increasing levels***. ***Producer margins have been stellar, which has been the source of much angst and frustration among many buyers***, who have struggled with higher costs and supply limitations this year."[29]

82. A China International Capital Corporation Limited ("CICC") reported that MDI prices had risen to record highs, noting that the "price of pure MDI now stands at Rmb 25,000/tonne, up 71% year on year and that the price of polymerized MDI is Rmb 25,000/tonne, up 127% year on year. On the contrary, the prices of main raw materials have increased by less than 50%." CCIC also noted that MDI prices and raw material prices had a spread of Rmb 16,900/tonne, and concluded that "***MDI profitability is at a historical high***."

83. On February 27, 2018, Hans-Ulrich Engel, the Vice-Chairman of the Board of Executive Directors and CFO at BASF, stated in an investors' call that "***significantly higher prices, especially for MDI and TDI, drove this [sales] growth***," explaining that the cause of the increased prices was "due in part to turnarounds and the force majeure at our Chongqing plant caused by a natural-gas supply-shortage at our syngas supplier."

84. In that same call, former BASF CEO Kurt Bock confirmed that the shutdown of the Chongqing plant "certainly ha[s] some ***double-digit EBIT impact***." He further commented that supplier issues on the U.S. Gulf Coast had reduced production volumes and "again a double-digit impact."

85. Moreover, as demonstrated from the following tables, ***Defendants implemented their price increases in a lockstep manner.*** The Isocyanate Producers' price increases occurred

[29] https://orbichem.wordpress.com/2017/10/20/isocyanates-when-will-the-tide-change/

in close proximity to one another's, ***often on the same day***. Notably, the ***amount of the Isocyanate Producers' price increases was either identical or nearly identical***.

86. The following table contains actual price-increase data and effective dates compiled using all publicly reported MDI price increase announcements between 2015 and 2018, largely by Defendants Dow, Wanhua, and BASF:

Date	Defendant	Price Increase (cents/lb.)
March 17, 2016	Dow	5
March 23, 2016	BASF	8
March 30, 2016	Wanhua	6
April 1, 2016	Dow	5
April 1, 2016	BASF	6
May 15, 2016	Wanhua	4
September 15, 2016	Dow	6
September 15, 2016	Wanhua	6
January 1, 2017	Dow	7
January 15, 2017	Wanhua	8
January 16, 2017	BASF	7
February 12, 2017	BASF	10
February 15, 2017	Dow	6
February 17, 2017	Covestro	(15% increase)
March 1, 2017	Wanhua	8
March 15, 2017	Dow	10

April 1, 2017	BASF	8
April 3, 2017	Dow	10
May 15, 2017	Dow	12
May 15, 2017	BASF	13
May 15, 2017	Wanhua	12
August 15, 2017	Dow	8
September 15, 2017	Wanhua	10
October 15, 2017	Dow	8
October 15, 2017	BASF	8
January 1, 2018	Dow	9
January 1, 2018	BASF	8
March 15, 2018	Dow	15
April 1, 2018	BASF	1
May 15, 2017	BASF	13

87. The following table contains actual price-increase data and effective dates compiled using all publicly reported MDI price increase announcements between 2015 and 2018, largely by Defendants Dow, Wanhua, and BASF:

Date	Defendant	Price Increase (cents/lb.)
March 17, 2016	Dow	5
March 23, 2016	BASF	8
March 30, 2016	Wanhua	6

April 3, 2017	Dow	10
May 15, 2017	Dow	12
May 15, 2017	BASF	13
April 1, 2016	BASF	8
April 15, 2016	Dow	5
May 13, 2016	BASF	8
May 15, 2016	Wanhua	4
May 17, 2016	Dow	8
June 15, 2016	Wanhua	5
July 8, 2016	Dow	5
July 21, 2016	BASF	5
October 7, 2016	BASF	10
October 11, 2016	Dow	10
October 13, 2016	Wanhua	10
December 15, 2016	Dow	10
February 1, 2017	BASF	10
February 15, 2017	Wanhua	10
March 21, 2017	Dow	10
April 1, 2017	BASF	8
May 1, 2017	BASF	10
May 15, 2017	Wanhua	10

Date	Defendant	Price Increase (cents/lb.)
August 15, 2017	Dow	8
August 15, 2017	Wanhua	8
August 20, 2017	BASF	8
October 1, 2017	Dow	12
October 1, 2017	BASF	12
December 1, 2017	Wanhua	10
February 1, 2018	BASF	10
February 1, 2108	Wanhua	10
March 1, 2018	Dow	15
March 1, 2018	Wanhua	10
April 1, 2018	BASF	10

88. As shown above, the Isocyanate Producers implemented MDI and TDI price increases in close proximity, ranging largely from a few weeks to announcements made ***on the same day***. Moreover, the price increases were for either identical or nearly identical amounts.

89. These price increases cannot be explained by any alleged change in demand for these products. Nor do changes in the price of raw materials for these products, which are the principal cost of manufacturing these products, explain the announced increases in the prices for these products.

a. Huntsman's CEO stated during an investor's call on July 28, 2016 that the improvement in Huntsman's margins has partly been driven by a "20% drop in benzene raw material costs and so forth. So I think it's a combination both of raw

material benefits and also moving further downstream and improving margins there."

b. Likewise, Covestro's CEO commented during an interview in late October 2016 that "[r]aw material prices have been dropping and are now at a low level, so the margin expansion to some extent has come from relatively stable pricing but reducing raw material costs."

90. Shortly after the DOJ began subpoenaing Defendants in late February 2018, the pricing of Isocyanates began to stabilize (although it continued to remain at artificially high levels up to and through the present due to Defendants' conspiracy).

iv. The Isocyanate Producers' anti-competitive conduct has incited a criminal investigation by DOJ.

91. On June 8, 2018, news publication Mlex reported that Isocyanates producers were the targets of a DOJ criminal price-fixing investigation. Covestro confirmed that it had been contacted by the DOJ regarding its investigation, and that it would cooperate with the authorities. The report stated that the targeted companies had received grand jury subpoenas during the last week of February 2018.

92. On June 11, 2018, BASF confirmed that it had also received a subpoena from the DOJ, along with "several other companies," related to an investigation into MDI and alleged violation of antitrust laws.

93. In order for the DOJ to institute a grand jury investigation, a DOJ Antitrust Division attorney must believe that a crime has been committed and the request for grand a jury must be approved by the Assistant Attorney General for the Antitrust Division. In addition, the fact that the DOJ Antirust Division investigation is criminal, as opposed to civil, is significant as well. The Antitrust Division's "Standards for Determining Whether to Proceed by Civil or Criminal

Investigation" state: "[i]n general, current Division policy is to proceed by criminal investigation and prosecution in cases involving horizontal, per se unlawful agreements such as price fixing, bid rigging and horizontal customer and territorial allocations."

v. Isocyanate Producers have reaped enormous profits from the supracompetitive prices of MDI and TDI products sold.

94. The Isocyanate Producers' conspiracy has been enormously successful, and they have each reaped massive profits at the expense of the Plaintiff and Class Members.

95. In 2016, Hunstman's second-quarter ***net income more than doubled*** year-on-year to $94 million from $39 million during the same period in 2015 on the back of stronger methylene diphenyl diisocyanate (MDI) margins and lower costs, the US-headquartered producer said on Wednesday.[30] Earlier this year, on February 23, Huntsman CEO Pete Hunstman noted that the "company benefitted from a continued spike in our component MDI in the most recent quarter. Overall, ***the company gained $85m extra profit*** in Q4 because the MDI market is short of material."[31]

96. Meanwhile, Covestro saw its 2017 ***net income rise 2.5 times year-on-year***, as "[a]cute supply issues" buoyed the company's performance, according to ICIS. Indeed, issues at BASF's flagship Ludwigshafen, Germany, TDI plant "since its start-up in 2016 have been instrumental in maintaining supply tightness in the market and driving up pricing."[32] In April of this year, the ICIS reported that Covestro's "[f]irst-quarter polyurethanes earnings before interest, taxes, depreciation and amortisation (EBITDA) ***rose 36.1% to €637m*** on the back of continued strong pricing for methyl di-p-phenylene isocyanate (MDI) and toluenedi-isocyanate

[30] https://www.icis.com/resources/news/2016/07/27/10019869/huntsman-q2-net-income-rises-targets-tio2-unit-spin-off-by-q1-2017/
[31] https://utech-polyurethane.com/contact-us/
[32] https://www.icis.com/resources/news/2018/04/26/10215704/strong-polyurethanes-polycarbonates-pricing-drives-covestro-q1-profit-jump/

(TDI) due to supply tightness and production shutdowns."[33]

97. In 2017, the "high price of isocyanates led to an ***almost 50% increase in earnings*** before interest and tax" for BASF's monomers the division.[34]

98. In 2017, Wanhua's ***net profits more than tripled*** as it experienced a 76% year-on-year rise in revenue. Over 56% of Wanhua's total revenue is related to the sale of polyurethane-related products, such as MDI.[35]

99. MCNS's ***operating profit in 2017 doubled*** compared to 2016.[36]

100. Dow said in a 1Q 2018 earnings call that "polyurethanes and CAV benefited from strong demand and price increases in downstream systems applications as well as from tight MDI fundamentals."

D. Isocyanate Producers have Opportunities and Incentives to Collude.

i. Defendants Take Advantage of Trade Association and Industry Meetings to Discuss Their Planned Conspiracy.

101. Throughout the Class Period, the Isocyanates Producers had ample opportunities to meet and collude with one another by participating in various conferences, trade associations, seminars, workshops, dinners and meetings.

102. There are many opportunities for Defendants to collude during the Class Period. For example, Defendants' representatives met at various conferences and dinners during the Class Period. Defendants BASF, Covestro, Dow, Huntsman and Wanhua (through its subsidiary BorsodChem) were five of the six members of ISOPA, a European trade association for producers of diisocyanates, which had several meetings during the Class Period that gave them

[33] https://www.icis.com/resources/news/2018/04/26/10215704/strong-polyurethanes-polycarbonates-pricing-drives-covestro-q1-profit-jump/
[34] https://utech-polyurethane.com/news/high-isocyanate-prices-2017-double-edged-sword-basf/
[35] https://utech-polyurethane.com/news/wanhua-reports-across-board-growth-2017/
[36] https://utech-polyurethane.com/news/mcns-grew-rapidly-2017/

the opportunity to collude. These Defendants met before, during, and after their meetings related to ISOPA to further their conspiracy. Defendants were also members of other organizations concerning diisocyanates such as ACC, the International Isocyanate Institute, CPI, PMA, and the DII Panel, which gave them further opportunity to collude.

ii. Isocyanate Producers' Incentives to Collude.

103. The Isocyanate manufacturers, as in the previous anti-trust litigation, had and have substantial incentives to collude to suppress the global supply of MDI and TDI during the Class Period.

104. *First*, the Isocyanates market is concentrated in the hands of a handful of firms. During the class period, the Defendants named here accounted for over 90% and 76% of the respective MDI and TDI markets in the United States. A high degree of concentration facilitates the operation of a cartel because it makes it easier to coordinate behavior among co-conspirators.

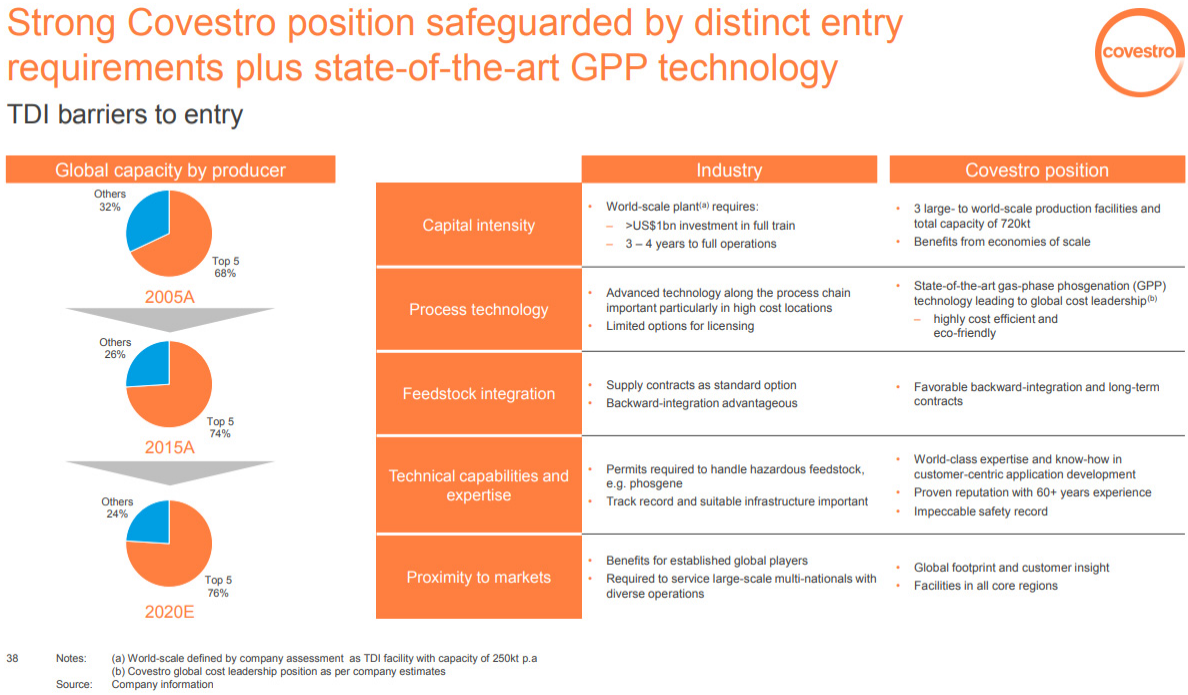
Figure 2: The industry is concentrated and oligopolistic in nature, with a handful of players accounting for a supermajority of the overall market share (in USD million) :

	Polyurethane Revenue	Polyurethane Market Share
GLOBAL	$53,940	100%
Covestro	$8,976	16.6%
DowDuPont	$12,647	23.4%
BASF	$9,019	16.72%
Huntsman	$4,339	8.04%
Wanhua	$2,569	4.76%

105. *Second*, the Isocyanate market has high barriers to entry. Supracompetitive pricing in a market normally attracts additional competitors who want to avail themselves of the high levels of profitability that are available. However, the presence of significant barriers to entry makes this more difficult and helps to facilitate the operation of a cartel. As Covestro detailed in a May

2016 Investor Presentation, Isocyanate Producers' market position is "safeguarded by distinct entry requirements."[37] For example, the industry is capital intensive, requiring greater than $1 billion investment to establish a "World-scale plant," which can take 3 to 4 years to attain "full operations.

Figure 3: Defendant Covestro notes that there are barriers to entry that create defensible market positions for established industry players.



106. *Third*, because MDI and TDI products are commodities, the conspiracy is simplified and more likely to be successful. Product homogeneity incentivizes and facilitates collusion because firms do not have to compete on non-price attributes such as quality and durability. MDI and TDI are "commodity chemicals," according to a report published in 2016 by Dr. Kai Plfug, a managing consultant for the chemicals industry.[38]

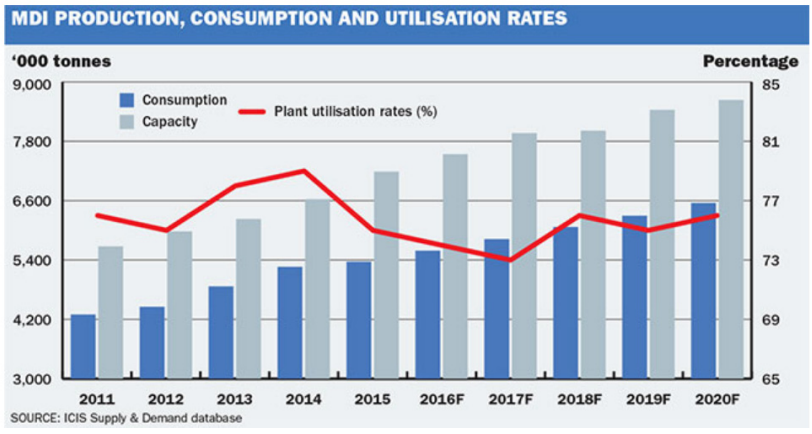
107. *Fourth*, there are no commercially viable substitutes for MDI and TDI. A report

[37] file:///C:/Users/gsanchez/Downloads/Covestro_Capital_Markets_Day_2016.pdf
[38] https://chemical-materials.elsevier.com/chemical-rd/complexity-as-a-key-entry-barrier-in-the-chemical-industry/

produced by the Danish Ministry of the Environment found that the use of alternatives to Isocyanates across several applications is limited by "quality, price and tradition."[39] For example, silane/STP, an Isocyanate-free foam, is about 8-9 times more expensive than the polyurethane-based foam. Purchasers are constrained to purchase MDIs and TDIs at the price at which it is offered because MDIs and TDIs are needed for feasible production of polyurethane. This gives Defendants pricing power and an incentive to collude. Indeed, one publication stated in 2018 that the persistent supply shortages and growing demand was leaving "isocyanate buyers . . . [with] little alternative but to accept consecutive rounds of price increases, with some sellers heard to have taken a ***'take it or leave it' attitude towards their price increase initiatives***. . . ."[40]

a. *Fifth*, the Isocyanate manufacturers had an incentive to collude because the industry suffers from excess capacity, meaning that manufacturers can produce more output than the customers want to buy; putting a strong downward pressure on prices. The ICIS noted that the Isocyanates market is "generally accepted as an overcrowded and oversupplied market." At all times during the Class Period, global consumption of MDI lagged beyond its production.

Figure 4: Isocyanate production suffers from excess capacity.



[39] https://www2.mst.dk/Udgiv/publications/2014/01/978-87-93026-91-9.pdf
[40] https://www.icis.com/resources/news/2018/01/04/10172916/outlook-18-us-isocyanate-buyers-hoping-to-see-improved-supply/

DEFENDANTS' ANTITRUST VIOLATIONS

108. During the Class Period, as explained above, the Isocyanate Producers and their co-conspirators engaged in a continuing agreement, understanding, or conspiracy in restraint of trade to artificially fix, maintain, suppress and stabilize the supply of Isocyanates and to fix the price of these products.

109. In formulating and effectuating the contract, combination, or conspiracy, the Isocyanate Producers and their co-conspirators engaged in anticompetitive activities, the purpose and effect of which were to fix, maintain, raise and otherwise make artificial the price MDI and TDI products. These activities included the following:

a. The Isocyanate Producers participated in meetings and/or conversations to unlawfully discuss the closing or suspensions of their plant operations;

b. The Isocyanate Producers agreed during those meetings and conversations to unlawfully coordinate plan shutdowns and operations reductions in order to drive down the global supply of Isocyanates and otherwise to depress or make artificial the global supply of MDI and TDI products;

c. The Isocyanates Producers signaled to one another their intention to depress or otherwise make artificial the supply of MDI and TDI products and colluded with one another in achieving this unlawful and anticompetitive purpose; and

d. Pursuant to such an unlawful conspiracy in restraint of trade, the Isocyanate Producers knowingly and collusively implemented lockstep price increases in order to increase or otherwise make artificial the price of Isocyanates.

110. By conspiring to manipulate the supply of MDI and TDI products, the Isocyanate Producers caused grave harm to the Plaintiff, Class Members, and the polyurethane market.

111. Plaintiffs and Class Members were injured by the Isocyanate Producers' anticompetitive collusion because they purchased Isocyanates at supracompetitive prices: they paid more, received less, or both for Isocyanates than they would have absent the Isocyanate Producers' collusive restraint.

112. The Isocyanate Producers' anticompetitive conduct had severe adverse consequences on competition in that the Plaintiff and other members of the Class who purchased Isocyanates during the Class Period were purchasing at artificially determined prices that were made artificial as a result of the Isocyanate Producers' horizontal price-fixing. As a consequence thereof, the Plaintiff and the Class suffered financial losses and were, therefore, injured in their business or property.

113. In a free and competitive market, the Isocyanate Producers would have competed vigorously to ensure that their operational capacities could meet market demand and to provide the best and most competitive prices for Isocyanates to their customers. They plainly did not do that.

114. The aforementioned anticompetitive aspects of Defendants' collusive conduct are not exhaustive, and Plaintiff believes that with the benefit of additional discovery and expert analysis additional anticompetitive aspects will be discerned from their horizontal price-fixing scheme.

RULE OF REASON – RELEVANT MARKET AND ANTICOMPETITIVE EFFECTS

115. In the alternative to the *per se* theory of liability, plaintiffs allege that Defendants conspired to engage in an unreasonable restraint of trade that is anticompetitive under the rule of reason.

116. During the Class Period, there were markets for TDI and MDI.

117. During and throughout the Class Period, the Defendants had dominant market power in each of the relevant markets. Defendants, as members of a highly concentrated commodities market, had the ability to control and exercised control over global supplies of Isocyanates.

118. Defendants' control over the global supply of Isocyanates meant that they were able, and did in fact, suppress Isocyanate supplies and cause prices of Isocyanates to be supracompetive in the relevant markets.

119. Defendants' ability to cause supracompetitive prices for Isocyanates in the relevant markets demonstrates their market power.

120. Defendants' conduct independently violates the Sherman Act under the rule of reason.

RELIEF

CLAIM FOR RELIEF
VIOLATION OF SECTION 1 OF THE SHERMAN ACT

121. Plaintiff incorporates by reference the preceding allegations.

122. Defendants and their unnamed co-conspirators entered into and engaged in a conspiracy in unreasonable restraint of trade in violation of Section 1 of the Sherman Act and Section 4 of the Clayton Act.

123. During the Class Period, Defendants controlled the dominant share of the Isocyanates markets and therefore controlled the global supply of said products.

124. The conspiracy consisted of a continuing agreement, understanding or concerted action between and among Defendants and their co-conspirators in furtherance of which Defendants fixed, maintained, suppressed, stabilized and/or otherwise made artificial the supply of Isocyanates and fixed the prices of the MDI and TDI products they sold. Defendants' conspiracy is a per se violation of the federal antitrust laws and is, in any event, an unreasonable

and unlawful restraint of trade and commerce.

125. Defendants' conspiracy, and resulting impact on the market for Isocyanates occurred in or affected interstate and foreign commerce.

126. As a proximate result of Defendants' unlawful conduct, Plaintiff and members of the Class have suffered injury to their business or property. Plaintiff and members of the Class are each entitled to treble damages for the violations of the Sherman Act alleged herein.

RELIEF SOUGHT

1. Accordingly, Plaintiff demands relief as follows:

2. That the Court determine that this action may be maintained as a class action under Rule 23(b)(3) of the Federal Rules of Civil Procedure, that the Plaintiff be appointed as class representative, and that the Plaintiff's counsel be appointed as counsel for the Class;

3. That the unlawful conduct alleged herein be adjudged and decreed to be an unlawful restraint of trade in violation of Section 1 of the Sherman Act and Section 4 of the Clayton Act;

4. That Defendants, their subsidiaries, affiliates, successors, transferees, assignees and the respective officers, directors, partners, agents, and employees and all other persons acting or claiming to act on their behalf, be permanently enjoined and restrained from continuing and maintaining the conspiracy alleged in the Complaint;

5. That the Plaintiff and the Class recover damages, as provided under federal antitrust laws, and that a joint and several judgment in favor of the Plaintiff and the Class be entered against Defendants in an amount to be trebled in accordance with such laws;

6. That the Plaintiff and the Class recover damages or other relief permitted by law or equity for the breaches of contracts and unjust enrichment;

7. That the Plaintiff and the Class recover their costs of the suit, including attorneys'

fees, as provided by law; and

8. That the Court direct such further relief it may deem just and proper.

DEMAND FOR JURY TRIAL

9. Pursuant to Rule 38(a) of the Federal Rules of Civil Procedure, the OTC Plaintiffs demand a jury trial as to all issues triable by a jury.

Dated: August 28, 2018

Respectfully submitted,

s/ William Christopher Carmody
William Christopher Carmody (WC8478)
Arun Subramanian (AS2096)
Seth Ard (SA1817)
SUSMAN GODFREY L.L.P.
1301 Avenue of the Americas, 32nd Floor
New York, New York 10019
Telephone: (212) 336-3330
Facsimile: (212) 336-8340
bcarmody@susmangodfrey.com
asubramanian@susmangodfrey.com
sard@susmangodfrey.com

Counsel for BRYN HILL INDUSTRIES, INC.